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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,512	07/16/2001	Masaaki Ehara	211206US3X	2269
22850	7590	03/05/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			LOPEZ, FRANK D	
			ART UNIT	PAPER NUMBER

3745

DATE MAILED: 03/05/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/904,512

Applicant(s)

EHARA ET AL.

Examiner

F. Daniel Lopez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### ***Drawings***

Figures 3, 4 and 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

The disclosure is objected to because of the following informalities: on page 3 line 14 --selectively-- should be added before "connected", since the two circuits are not always connected in series, due to the switching valve discussed in a subsequent paragraph; and on page 3 line 22-25 "At the second position, both the circuits are cut off, and the actuator circuit at downstream out of both the circuits is connected to the second hydraulic source" is confusing English and wrong, since it contradicts the next paragraph and the discussion in the remainder of the specification. Suggest that page 3 line 22-26 "At the second position...In this case, when" be replaced by --When--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

Claims 1-7 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 line 6 --selectively-- should be added before "connected", since the two circuits are not always connected in series, due to the switching valve claimed in a subsequent paragraph. In claim 1 line 15-18 (claim 7 line 10-12 has similar limitations, with similar problems) "both the circuits being cut off at the second position, the actuator circuit at downstream out of both the circuits being connected to said second hydraulic source" is confusing English and wrong (see objection to the specification).

In claim 3 line 2-3 "wind-up motor circuit has a main motor circuit...and an auxiliary motor circuit" is wrong; since the wind-up motor circuit is claimed as being in the first actuator group (claim 1 line 2-5, see fig 1 C), but the disclosure shows that the

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main motor circuit (34) is in the second actuator group (D). Note that claim 4 does not fix the problem, since it also contradicts the same part of claim 1.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-4, 6 and 7 are rejected under 35 U.S.C. § 103 as being unpatentable over Applicant's admitted prior art in view of Birdwell et al. Applicant's admitted prior art discloses a hydraulic circuit for a crane (e.g. fig 5) comprising first (A) and second (B) actuator groups driven by first (10) and second (11) hydraulic sources, respectively; wherein the first actuator group includes an auxiliary winding motor circuit (14) connected in series with and downstream of a boom circuit (13) and, via respective control valves; and the second actuator group includes a main winding motor circuit (16) in series with a right traveling motor circuit (15); wherein the boom circuit is a driving circuit for a winch motor for jib hoisting; but does not disclose a two position switching valve between control valves for the boom and auxiliary wind-up circuits, wherein when the switching valve is in a first position, the boom and auxiliary wind-up circuits are connected in series; and when the switching valve is in a second position, the boom and auxiliary wind-up circuits are disconnected from each other, with the auxiliary wind-up circuit connected to the second hydraulic source; and wherein the switching valve is a hydraulic pilot valve switched by an electromagnetic valve in a pilot line of the switching valve.

Birdwell et al teaches, for a hydraulic circuit comprising first (A) and second (B) actuator groups driven by first (42) and second (44) hydraulic sources, respectively; wherein the first actuator group includes a second motor circuit (68, 36) selectively connected in series with and downstream of a first motor circuit (58, 30), via respective control valves; and the second actuator group includes a motor circuit (82, 84) in series with a traveling motor circuit (66, 18); that a two position hydraulic pilot operated switching valve (62) is between the control valves for the first and second motor circuits, wherein when the switching valve is in a first position, the first and second motor circuits are connected in series; and when the switching valve is in a second position, the first and second motor circuits are disconnected from each other, with the second circuit connected to the second hydraulic source; and wherein the switching valve is switched by a valve in a pilot line of the switching valve, which switches the control valve of the first motor circuit, for the purpose of providing a more efficient and versatile control system (e.g. column 2 line 40-41), by arranging motors in order of priority, with means for combining pump flow for selected motors (column 2 line 58-61).

Since Applicant's admitted prior art and Birdwell et al are both from the same field of endeavor, the purpose disclosed by Birdwell et al would have been recognized in the pertinent art of Applicant's admitted prior art. It would have been obvious at the time the invention was made to one having ordinary skill in the art to add a two position hydraulic pilot operated switching valve between the control valves for the boom and auxiliary wind-up circuits of Applicant's admitted prior art, wherein when the switching valve is in a first position, the boom and auxiliary wind-up circuits are connected in series; and when the switching valve is in a second position, the boom and auxiliary wind-up circuits are disconnected from each other, with the auxiliary wind-up circuit connected to the second hydraulic source; and wherein the switching valve is switched by a valve in a pilot line of the switching valve, which switches the control valve of the first motor circuit, as taught by Birdwell et al, for the purpose of providing a more efficient and versatile control system, by arranging motors in order of priority, with means for combining pump flow for selected motors.

Official notice is taken that control valves for motor circuits can be switched using a variety of types of valves, including electromagnetic valves. It would have been obvious at the time the invention was made to one having ordinary skill in the art to use an electromagnetic valve as the valve in a pilot line of the switching valve of the modified Applicant's admitted prior art, as a matter of engineering expediency.

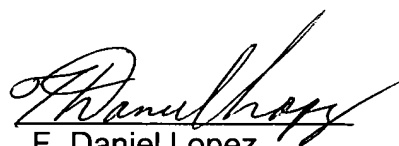
### ***Conclusion***

Claim 5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Okabe et al refers to a switching valve controlled by a simultaneous operation detector, but there is no motivation to combine Okabe et al with Applicant's admitted prior art and/or Birdwell et al to meet the limitations of claim5.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is (703) 308-0008. The examiner can normally be reached on Monday-Thursday from 6:30 AM -4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on (703) 308-1044. The fax number for this group is (703) 872-9302. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0861.

  
F. Daniel Lopez  
Primary Examiner  
Art Unit 3745  
March 3, 2004